# Evaluative Reporting Process

Evaluative reporting is a formalised thought process that enables the evaluation of scientific findings given two opposing (or competing) propositions. It is a way of providing a strength of the findings of a forensic examination given those alternative propositions.

#### **Prosecution position**

The explanation being put forward by the prosecution.

## **Defence position**

The explanation being put forward by the defence. Note that there may be no scenario offered by defence, in which case, where possible, the responsibility of assigning a reasonable defence proposition falls to the individual carrying out the evaluation.

### **Propositions 1.**

The propositions are based on the case circumstances, the defence/prosecution scenarios and the availability of case items, and it is against these propositions that the findings will be evaluated. The propositions should not change as a result of observations, although are free to change as more information regarding case circumstances, or information from defence and prosecution is obtained.

# Expectations 2.

The list of expected outcomes based upon the propositions.

#### Analyses 3.

The tests carried out on case items, and any samples taken from them. Typically, the type of tests will be dictated by the propositions and expected outcomes being considered and the state/nature of the samples.

#### Findings 4.

The observations or results from the laboratory analyses.

# **Evaluation 5.**

The consideration of all observations in light of propositions, relevant information, limits of the testing procedure used, knowledge and experience. This may involve the assignment of a numerical value for the probability of the findings given the competing propositions or may be non-numerical and instead a statement of relative support for one proposition over the other.

#### Reporting 6.

**Evaluation** 

Consider

Reporting of

Results

The explanation of the whole process for the fact-finder, including the information and method used to form propositions, the available case items, the analyses carried out on them, the resulting observations, the method of evaluation and the conclusions drawn from it. Assumptions made during the evaluative processes should be made clear to the fact-finder.

#### Body of knowledge and experience

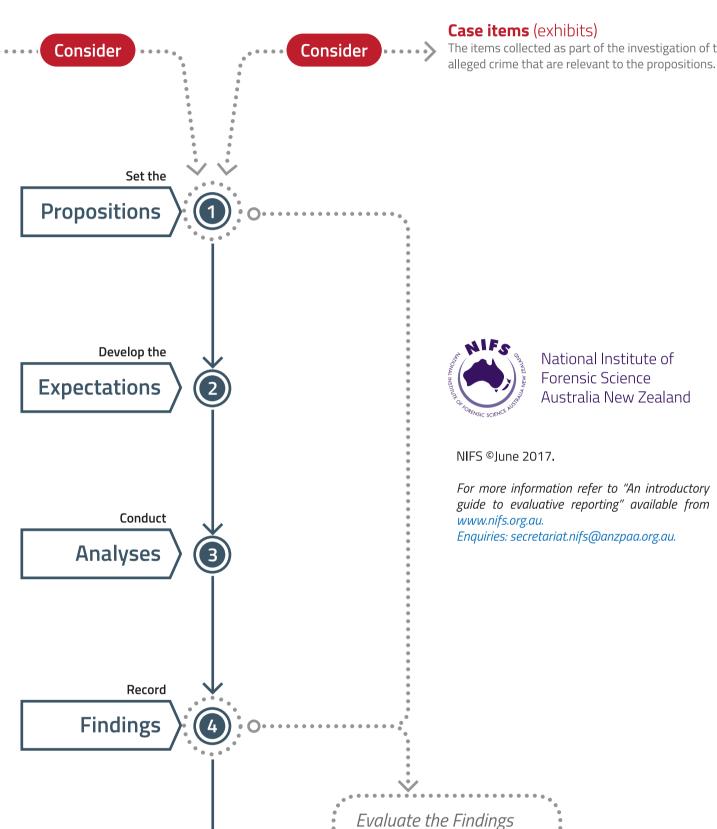
The base of information that the analyst will draw on to assess components of their overall evaluations. This may include published literature, databases of characteristic frequencies, knowledge of analysis limitations, professional experience or personal knowledge, beliefs and assumptions.

The principles and terminology associated with each step in the evaluative reporting process is summarised in this flow-chart.

#### Case circumstances

The framework of circumstances surrounding the alleged crime and the items relating to individuals who may be involved. Case circumstances are typically considered to be relevant details required to evaluate the observations.

The items collected as part of the investigation of the



#### Case Specific domain Consider relevant information

Against the Propositions

Includes information that is not directly a case circumstance, but is still important to the evaluation of the observations. These include aspects such as the time between case items being obtained and examined, or the manner of item collection and handling.